

### **VEHICLE TYPE**

Conversion Of: Geo Metro VIN: 2C1MR2466N6766568 Seating Capacity: **2 Adults** Features: Power Brakes, Front Wheel Drive, Front Disk Brakes & Heater

### **DIMENSIONS**

Wheelbase: 89.4 inches
Track F/R: 54.3/53.8 inches
Length: 148.3 inches
Width: 62.4 inches
Height: 52.0 inches

Ground Clearance: >50 mm Cargo Space: **Battery Pack Displaces** 

Rear Seat and OEM Cargo Well.

### WEIGHT

Curb Weight: 2560 lbs Test Weight: 2582 lbs Distribution F/R: 49/51 % Conversion GVWR: 2910 lbs OEM GVWR: 2447 lbs

### Payload: 328 lbs

WHEELS & TIRES Wheel Size: 13 inch Tire Mfg: Goodyear Invicta Tire Size: P175/70R13 Tire Pressure F/R: 44/44 psi Spare Installed: No

### **DRIVE SYSTEM**

Drive Type: Brush DC
Motor Mfg: Advanced DC Motors
Controller Mfg: Contin PMC

Controller Mfg: Curtis PMC Transmission: **5 Speed Manual** 

### **BATTERY**

Manufacturer: Trojan

Type: T145 Flooded Lead Acid

Number of Modules: 13 Total Traction Voltage: 78 Volts Battery Pack Weight: 923 lbs

Locations In Vehicle: Rear Seat & Trunk

#### **CHARGER**

Location: Behind Driver Seat Input Voltage(s): 120 volts AC Input Current(s): 13 amperes AC

### **INTERLOCKS**

Key Removable When Off Only: Yes

Key Off In Park Only: **No** Start In Park Only: **No** 

Start Blocked By Accelerator: **No** Start Blocked On Charge: **No** 

### REQUIREMENTS

Manual Disconnect Present & Operational: No
Batteries Sealed or Valve Regulated: No
Charger Automatic Control: Yes
SOC Indicator Present: Yes
Battery Voltage Indicator: No
Batttery Current Indicator: Yes
Regenerative Current Indicator: N/R
Transmission Single Speed: No
Transmission Parking Pawl: No
No Open Access to High Voltage: No
All High Voltage Clearly Marked: No
Control Efforts Similar To OEM: Yes

Test Date: October 1994

**Notes:** 

**Bold** - Results did not meet EV America

Performance Goal

\* - Tested at gross vehicle weight N/R - No regenerative braking

### **TEST EXCEPTIONS**

Payload 372 lbs less than required
Test weight greater than OEM GVWR
OEM GVWR re-rated by converter (not certified)
Flooded electrolyte batteries
Testing delayed by high battery temperature
Testing delayed by charge times > 8 hours

# **EVA**MERICA

# PERFORMANCE STATISTICS

# ACCELERATION AT 90% SOC \*

Zero to 30 mph: 8.7 sec Zero to 40 mph: 15.3 sec Zero to 50 mph: 17.7 sec Zero to 60 mph: 35.5 sec

Performance Goal: 13.5 seconds; 0 to 60 mph

### ACCELERATION AT 50% SOC

Zero to 30 mph: 9.4 sec Zero to 40 mph: 16.5 sec Zero to 50 mph: 26.0 sec Zero to 60 mph: 43.0 sec

Performance Goal: 13.5 seconds; 0 to 60 mph

### **MAXIMUM SPEED**

At 50% SOC: **67 mph** Performance Goal: 70 mph

#### CONSTANT SPEED RANGE

45 mph Distance: 88.4 miles 45 mph Energy Used: 14.5 kWhr 45 mph Efficiency: 0.164 kWhr/mile 45 mph Specific Energy: 0.0157 kWhr/lb 60 mph Distance: 51.6 miles 60 mph Energy Used: 11.3 kWhr 60 mph Efficiency: 0.219 kWhr/mile 60 mph Specific Energy: 0.0122 kWhr/lb

### DRIVING CYCLE RANGE

77°F Distance: **49.50 miles**77°F Energy Used: 11.64 kWhr
77°F Efficiency: 0.235 kWhr/mile
77°F Specific Energy: 0.0126 kWhr/lb
19°F Distance: **33.20 miles**19°F Energy Used: Not Measured
19°F Efficiency: Not Measured

19°F Specific Energy: Not Measured Performance Goal: 60 miles

### GRADEABILITY\*

Maximum Grade: 42% Performance Goal: 25% Speed At 3% Grade: 56 mph Performance Goal: 55 mph Speed At 6% Grade: 42 mph Performance Goal: 45 mph

# HANDLING COURSE

Avg Time @ 90% SOC: 60.9 sec Avg Time @ 50% SOC: 61.3 sec Avg Time @ 20% SOC: 64.5 sec Avg Dodge Neon (ICE) Time: 54.62 sec Average Chevrolet S-10 Time: 58.29 sec

### **BRAKING STABILITY**

Controlability: No Stability Problems Distance Dry/Wet: 177.2/272.8 feet

# CHARGER

Ground Current During Charge: 3 mA Battery Leakage Current: 0.01 mA Charger Efficiency: 93 % Average Power Factor: **0.54** 

Performance Goal: 0.95 Average THD: **91.1** % Performance Goal: 5%

Time From 80% DOD: 10 hours 40 minutes

Performance Goal: <8 hours